

CP2 CONFIGURATION TOOL GUIDE v3.7.1

*A jumpstart to video
telematics
configuration*


Sensata
Technologies

 **SMARTWITNESS**



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Introduction

1.0 Welcome to your CP2 Configuration Guide

This guide aims to inform users of the proper processes involved in setting up your SmartWitness CP2 device.

This step-by-step walkthrough will act as your teacher as you learn our product's layout, functionality, and configuration settings. Each section shown in this guide features the CP2's default settings.

You can find an overview of the configuration tool's layout in [section 3.0](#).

The fastest way to find information in this document is through the Table of Contents.

We hope that this training document will remove common end-user pain points involved with the setup process. If you experience any issues with this guide, please lend us your feedback and/or contact our [support](#) teams.

CP2 Download & Installation

2.0 CP2 Configuration Tool Installation

Goal: Find your configuration wizard and learn about your device's capabilities

2.1 Downloading & Installing Your Configuration Tool

- Download configuration software [HERE](#).



1. After download, proceed to installation.
2. Open configuration tool, insert your SD card*.
3. Click **Initialize SD Card**.
4. Select **SD Card** from the preferred internet browser.
5. Click **Start** to initialize.

Note: SD cards from SmartWitness (e.g., the SD card included with your CP2) are already initialized.

*The maximum size supported for your SD card is 128 GB.

CP2 Configuration Tool Layout

3.0 Configuration Tool Layout & Settings

Goal: Understand your tool's main features

The screenshot shows the 'Configuration Tool' window with several callouts explaining its features:

- Settings Tabs designate major areas of configuration:** Points to the tabs at the top: Device, Record, Event, Info., Connectivity, and Server.
- Some settings sub-fields use checkboxes:** Points to the checkboxes for CAM1 and CAM2 in the Camera section.
- Some settings sub-fields use text fields:** Points to the text input fields for Camera Title (CAM1, CAM2).
- Some settings sub-fields use drop-down selection:** Points to the Video Type dropdown menu (NTSC).
- Click 'About' to see configuration tool version information:** Points to the 'About' button at the bottom left.
- Click 'Settings' to change the language:** Points to the 'Settings' button at the bottom left.
- Click 'Initialize SD Card' to prepare SD card:** Points to the 'Initialize SD Card' button at the bottom left.
- Click 'Open' to load a previously saved configuration:** Points to the 'Open' button at the bottom right.
- Click 'Save' after each settings tab configuration:** Points to the 'Save' button at the bottom right.
- Click 'Eject SD Card' at the end of the configuration process:** Points to the 'Eject SD Card' button at the bottom right.

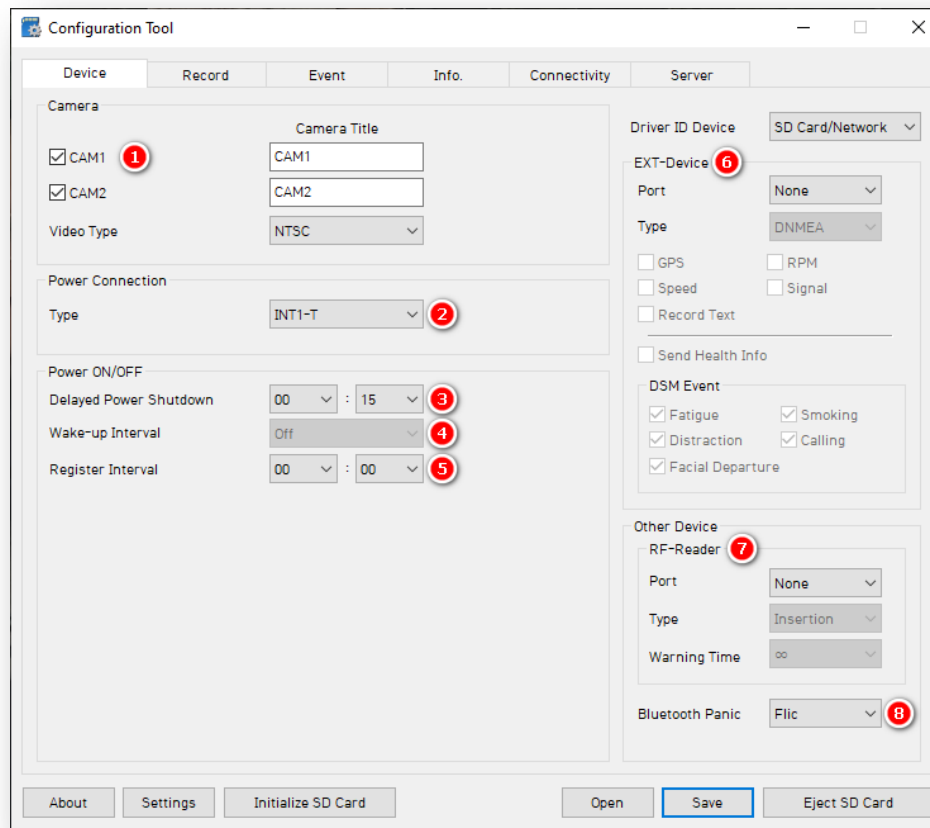
Device

4.0 Configure your Device

Goal: Personalize and optimize device settings

4.1 How to Configure Device Tab

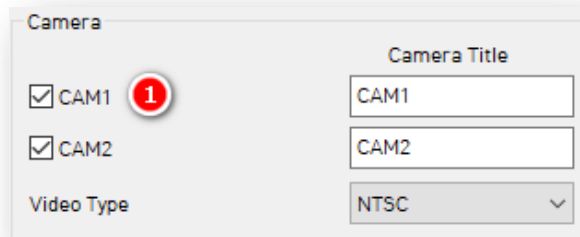
Device Tab Layout: At a Glance



Device

Camera

1. Activate both primary and secondary cameras by checking **CAM 1** and **CAM 2**.
 - Set the second camera video standard via **Video Type**.
 - NTSC is the default for 5V SmartWitness driver-facing cameras.

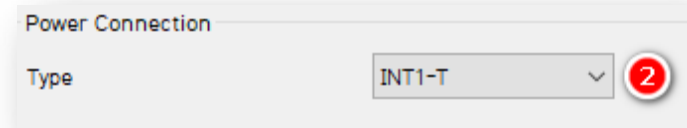


Camera

	Camera Title
<input checked="" type="checkbox"/> CAM1 1	<input type="text" value="CAM1"/>
<input checked="" type="checkbox"/> CAM2	<input type="text" value="CAM2"/>
Video Type	NTSC v

Power Connection

2. Select the device's power **type** from the dropdown options.
 - INT1-T is CP2's standard.



Power Connection

Type v 2

Device

Power On/Off

3. Select the amount of time your CP2 remains on after ignition off via **Delayed Power Shutdown's** dropdown options.
4. Set the time, or **Wake-up Interval**, until your CP2 powers on again after shutting down.
5. Set the time, or **Register Interval**, that your CP2 stays on during its Wake-up Interval.

Power ON/OFF

Delayed Power Shutdown 00 : 15 3

Wake-up Interval Off 4

Register Interval 00 : 00 5

EXT-Device

6. To allow external devices to work with your device, select from **EXT – Device's** list of accessory devices and relevant data points. Add-ons connect to the device's serial input once you choose the **'S1'** port.

EXT-Device 6

Port None

Type DNMEA

GPS RPM

Speed Signal

Record Text

Send Health Info

DSM Event

Sleeping Smoking

Distraction Calling

Facial Departure

Note: DSM event access requires you to use specific “Driver State Monitoring” AI camera models like KP2.

Device

Other Device

7. **(Optional)** Set up an accessory device (RF or Radio Frequency Reader) that connects to the serial input. Designate the reader type and warning time.
8. Allow your device to operate with a wireless **Bluetooth Panic** button. Locate setup specifications [here](#).

Other Device

RF-Reader 7

Port None

Type Insertion

Warning Time ∞

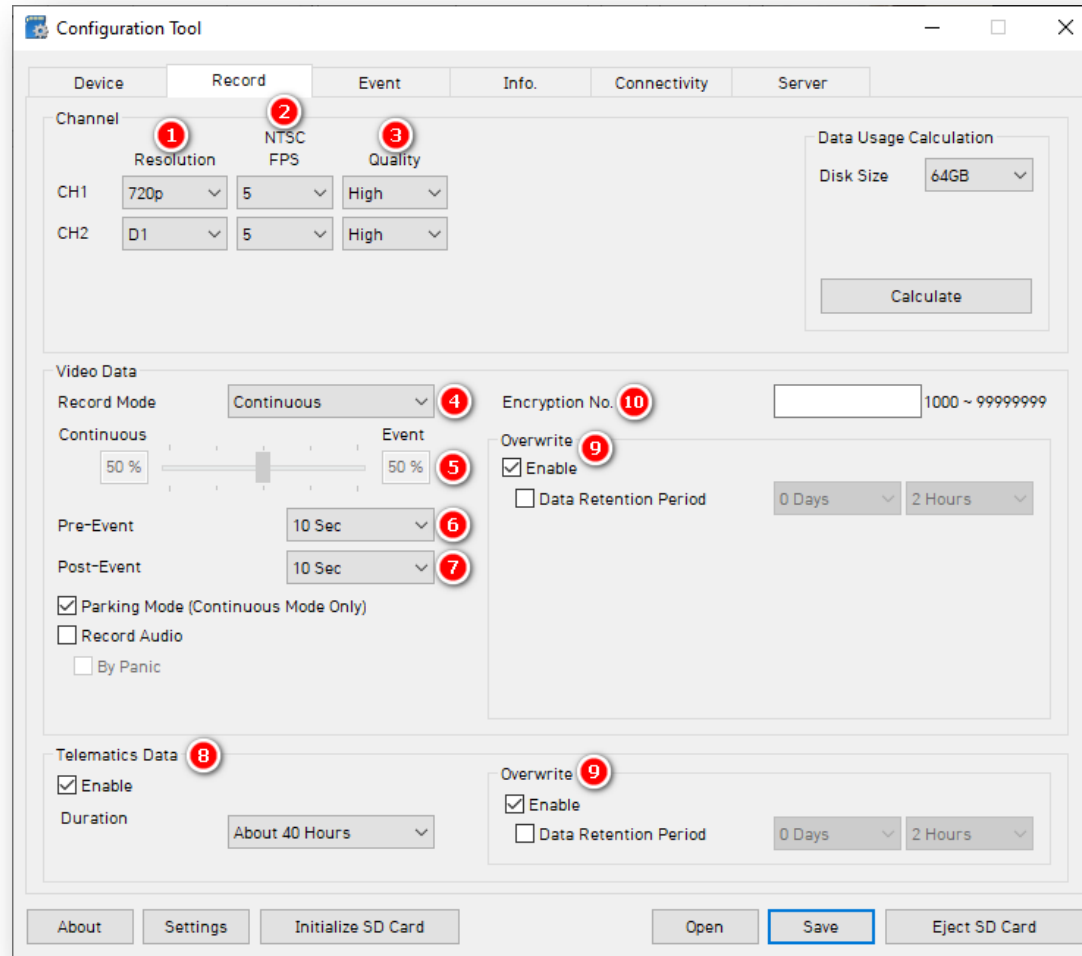
Bluetooth Panic Flic 8

Note: Contact SmartWitness about RFID system compatibility. SmartWitness' SmartID replaces the need for RFID systems to manage driver identification.

Record

4.2 How to Configure Record Tab

Record Tab Layout: At a Glance



Record

Channel

1. Select your **Resolution** from the following options:
 - CH1: **VGA**, HD (**720p**), FHD (**1080p**)
 - CH2: **D1** (720 x 480)
2. Select from the following **Frame Rate** options:
 - **30fps, 15fps, 10fps, 5fps, 4fps, 3fps, 2fps, 1fps**
3. Choose your default video **Quality** from the following:
 - **Standard** (Most Compressed), **High**, or **Super** (Lossless) Bitrate.

Channel	Resolution	NTSC FPS	Quality
CH1	720p	5	High
CH2	D1	5	High

Video Data

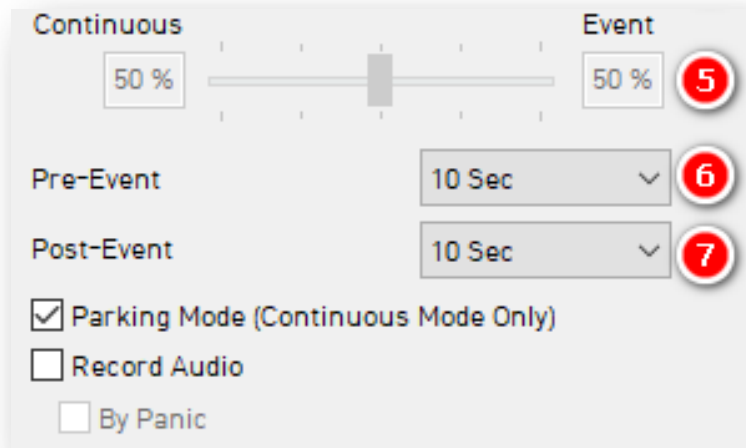
Select your preferred **Record Mode** from the following:

- **Event:** Only records events. The pre & post-event setting determines settings.
- **Continuous** (Default): Video continuously records, with no events documented (Sent to SmartAPI if configured in the [Server](#) tab).
- **Continuous+Event:** Video continuously records at 1 FPS. Events will record at your specified FPS.

Record Mode: Continuous

Record

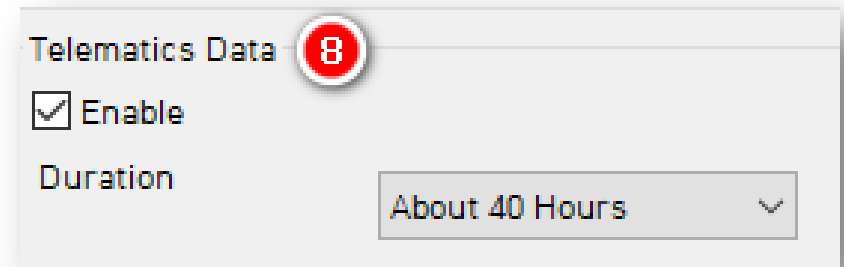
5. If you choose **Continuous + Event** mode, set the SD card's ratio of video data recording.
6. Determine the time video records before the event and set your **Pre-Event Setting**.
7. To set the time video records after the event, choose your **Post-Event Setting**.



Note: Pre/post time settings do not apply to Continuous record mode.
Parking Mode reduces FPS to 1 when the vehicle idles for 5 min.

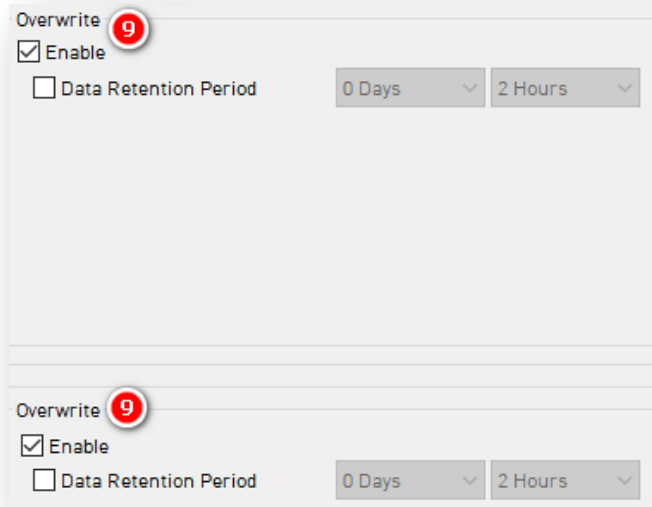
Telematics Data

8. Set the duration of your DRV Storage by clicking **Enable** and selecting a **Duration**. DRV files record and are stored from video/event logs separately.

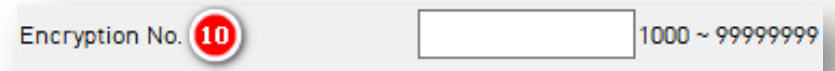


Record

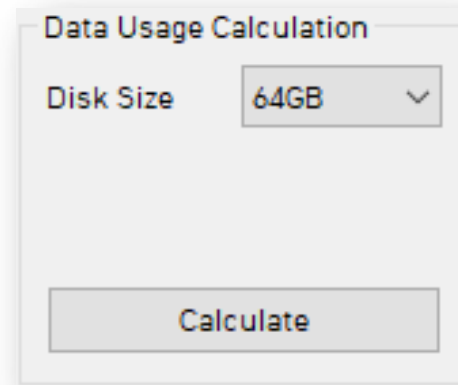
- To turn on the device's overwrite feature, click **Enable**. This automatically rewrites SD card video footage and telematics data.
 - Data Retention Period** determines how long data remains on the SD card. If activated, the data deletes once the set time expires.



- Protect SD card data from being easily viewable by entering an 8-digit **Encryption No.**



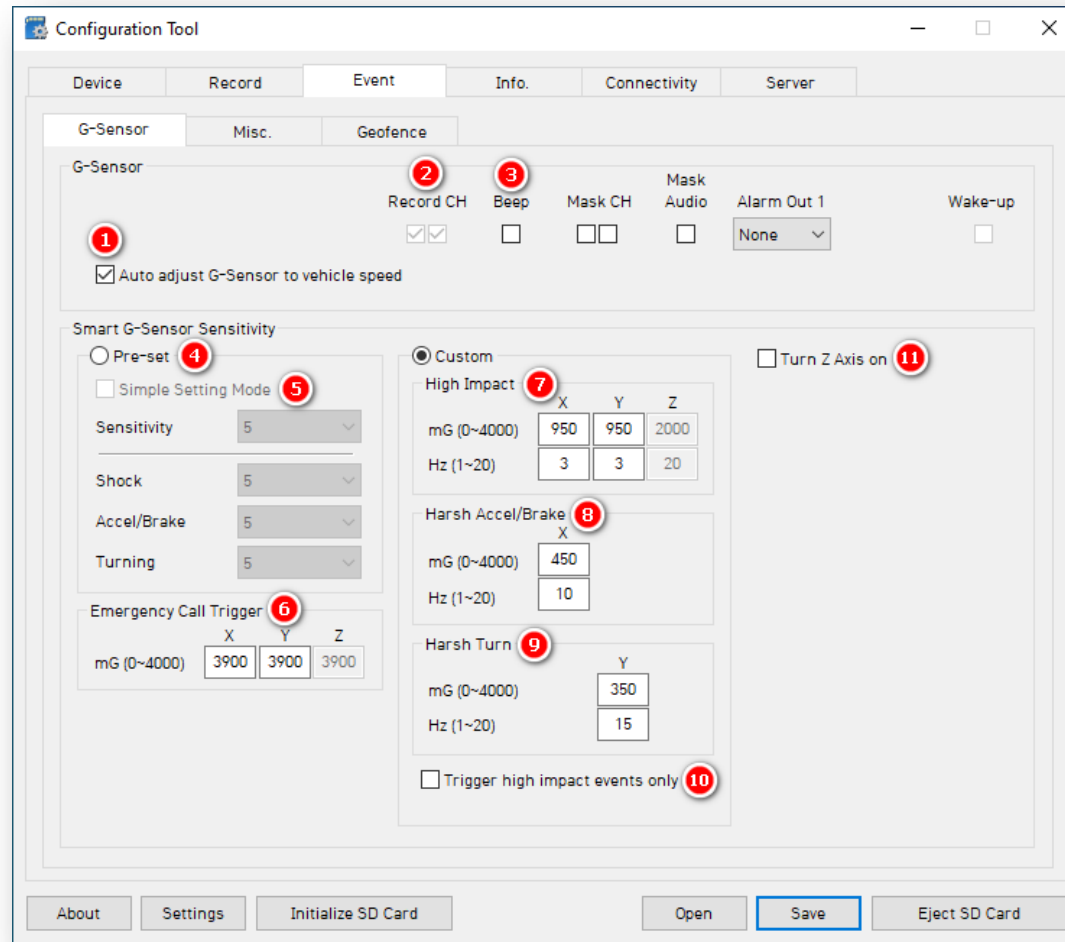
Note: Using your current configuration, apply different **Disk Sizes in Data Usage Calculation** to estimate storage capacity.



Event

4.3 How to Configure Event Tab

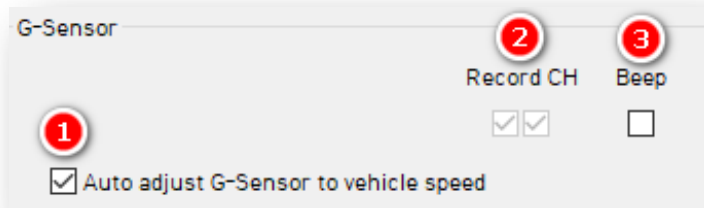
Event Tab Layout: At A Glance



Event > G-Sensor

4.3.1 G-Sensor Fields

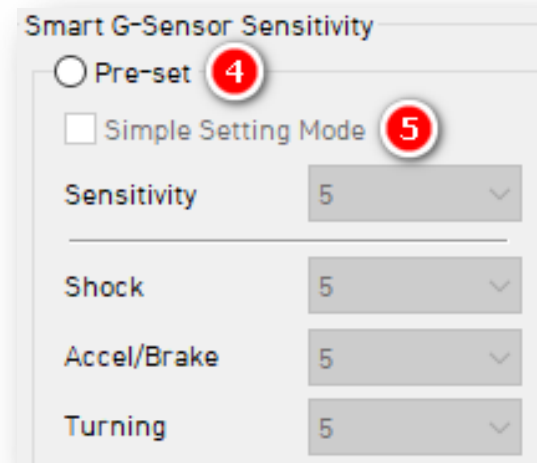
1. To increase G-Sensor threshold at higher vehicle speeds, click **Auto Adjust G-Sensor to vehicle speed**.
2. Turn on/off event recording for cameras 1 and 2 by checking **Record CH**
 - Only available for Event and Continuous + Event mode.
3. To enable in-vehicle noise notifications, click **Beep**.



Note: Individual selection of camera channels disables when your device is in “Continuous” mode.

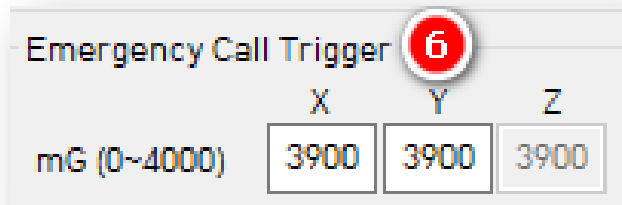
Smart G-Sensor Sensitivity

4. Use default options when for G-Sensor’s sensitivity by clicking **Pre-set**. Choose (1-10 scale) your vehicle’s **Shock, Acceleration/Brake, and Turning** responsiveness for events.
5. To select (1-10 scale) the vehicle’s G-Sensor’s overall sensitivity, check **Simple Setting Mode**.



Event > G-Sensor

- Set the event shock threshold of the X and Y axis' for **Emergency Call Trigger**. "Ecall" or "SevereShock" is for drastic G-Sensor impacts and allows your device to send emergency notifications.



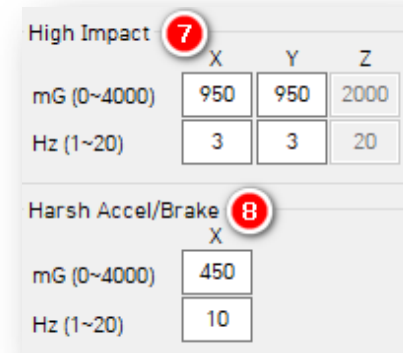
Note: Axis orientations mean the following:

- **X** = Front/Back
- **Y** = Left/Right
- **Z** = Up/Down

Custom

To set personalized G-Sensor sensitivity settings, click **Custom**.

- Set **High Impact** event shock range for the X and Y axis.
- Set **Harsh Accel/Brake** shock range.



Note: Hz = Consecutive milliseconds that the G-Sensor is above the set value. Use a lower Hz for High Impact settings. Use a higher Hz for Harsh Accel, Brake and Turn settings. "Simple Setting Mode" is fixed to 1Hz. "Custom" is adjustable.

Event > G-Sensor

9. Set **Harsh Turn** event shock range for the Y-axis.
10. To limit alerts to high impact events (see #7), check **High Impact Trigger**.
 - If activated, your device will not send Accel/Brake/Turn events .

Harsh Turn **9**

	Y
mG (0~4000)	350
Hz (1~20)	15

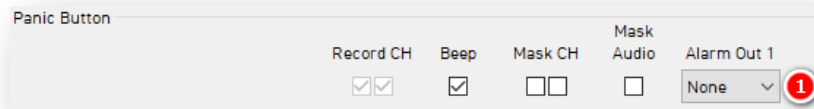
Trigger high impact events only **10**

Event > Misc.

4.3.2 Misc. Fields

Panic Button

1. Determine your settings preferences in response to drivers pushing the **Panic Button**.
 - Turn on audible in-cabin notifications for panic events by selecting **Beep**.
 - **Alarm Out** sends a 5V output through Alarm Out (Yellow Wire).

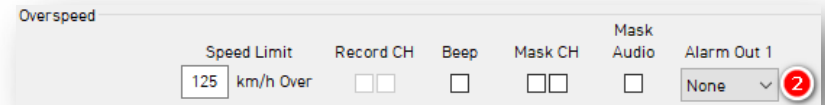


Panic Button

Record CH	Beep	Mask CH	Mask Audio	Alarm Out 1
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	None <input type="button" value="v"/> 1

Overspeed

2. Set your speed threshold in the **Speed Limit** field for recording Overspeed events.
 - Accounts for vehicle speed, not regional speed limits.



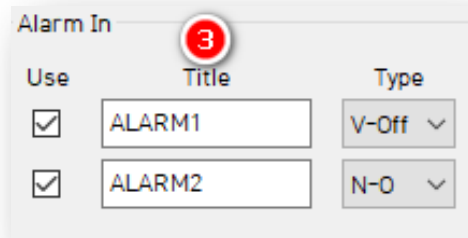
Overspeed

Speed Limit	Record CH	Beep	Mask CH	Mask Audio	Alarm Out 1
125 km/h Over	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	None <input type="button" value="v"/> 2

Event > Misc.

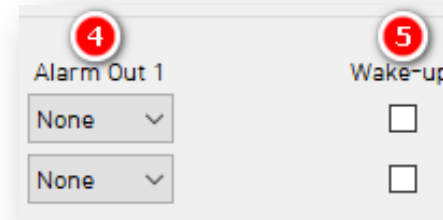
Alarm-In

- To set your optional alarm input triggers, check **Use**. Label them in the **Title** field according to your input type (i.e., doors, horn, lights, etc.).
 - **Alarm 1** = Orange Wire
 - **Alarm 2** = Green Wire
 - **Input Types:**
 - **N-C** (Normally Closed Circuit)
 - **N-O** (Normally Open Circuit)
 - **V-On/Off** (12V)



Use	Title	Type
<input checked="" type="checkbox"/>	ALARM1	V-Off
<input checked="" type="checkbox"/>	ALARM2	N-O

- Select the alarm duration for a third-party device from **Alarm Out 1**.
 - Sends a 5V output through the Yellow Wire to your 3rd party device.
- Turn on CP2 when Alarm Input triggers by enabling **Wake-up**.
 - CP2 stays on for the time set in Register Interval.



Alarm Out 1	Wake-up
None	<input type="checkbox"/>
None	<input type="checkbox"/>

Event > Misc.

EXT-Signal

6. Signal events are reserved for RS232 accessory devices with their own event triggers (like an ADAS or DSM camera). This allows CP2 to configure recording, masking and display rules for accessory devices. EXT-Signal serves no purpose beyond RS232 accessory devices.

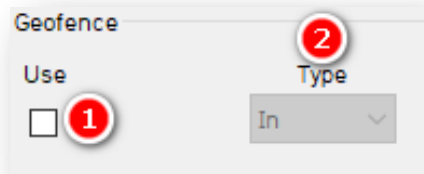
EXT-Signal 6								
Use	Title	Record CH	Beep	Mask CH	Mask Audio	Alarm Out 1	Alarm Out 2	
<input type="checkbox"/>	LEFT	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	None ▾	None ▾	
<input type="checkbox"/>	RIGHT	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	None ▾	None ▾	
<input type="checkbox"/>	BRAKE	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	None ▾	None ▾	
<input type="checkbox"/>	REVERSE	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	None ▾	None ▾	

Event > Geofence

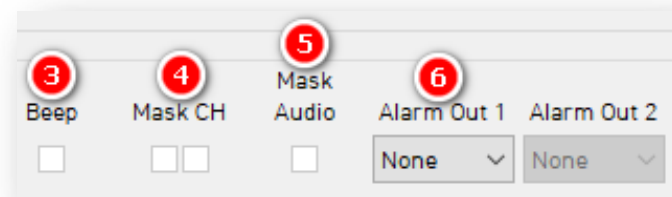
4.3.3 Geofence Fields

Set virtual boundaries for your device to record events. Optionally, obscure your camera's field of vision and audio recording.

1. To enable your device's Geofence, click **Use**.
2. Select the **Type** of Geofence.
 - **In** - Geofence triggers when the vehicle enters the geographic boundary.
 - **Out** - Geofence triggers when the vehicle exits the geographic boundary.



3. Audibly notify drivers that they have crossed the Geofence's boundary by clicking **Beep**.
4. To obscure camera channels 1 & 2, check **Mask CH**.
5. To prevent the device's audio recording, check **Mask Audio**.
6. Set the alarm's duration for a third-party device from **Alarm Out 1**.

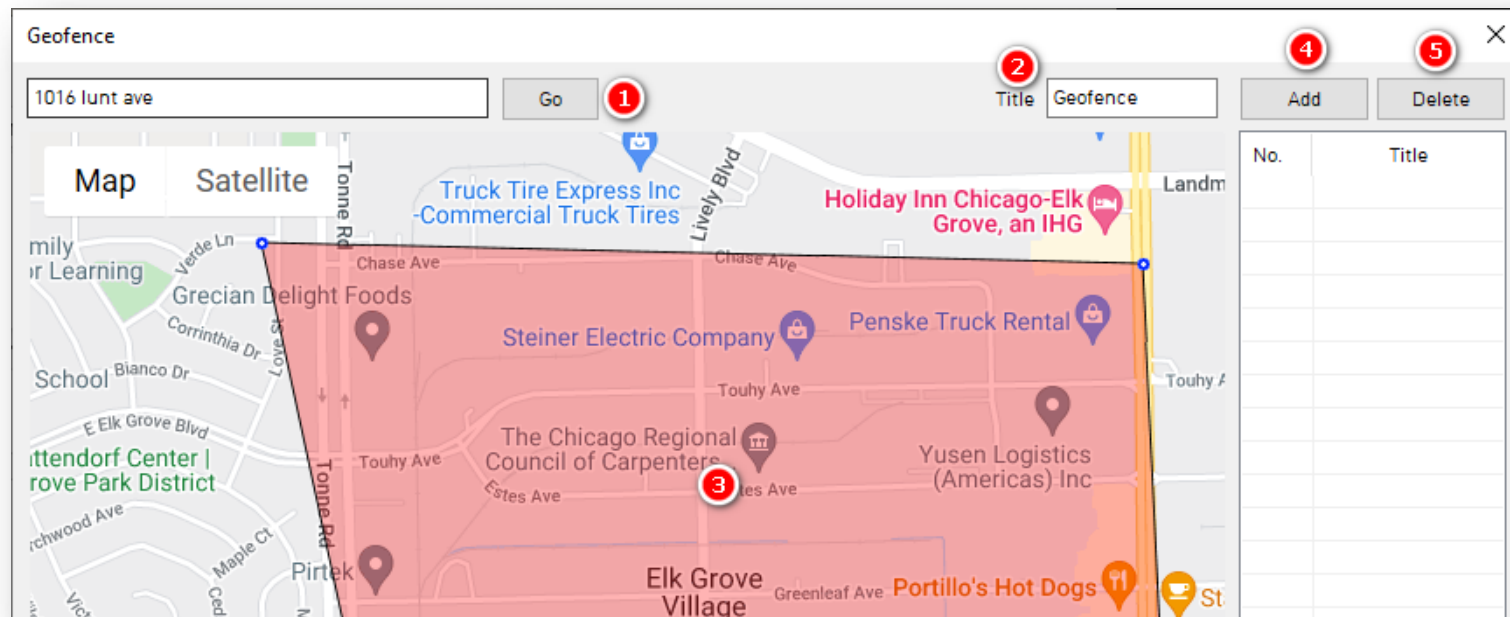


Event > Geofence

Zone Selection

To set geofence boundaries on Google Maps, click on **Zone Selection**. You may setup 20 geofence zones.

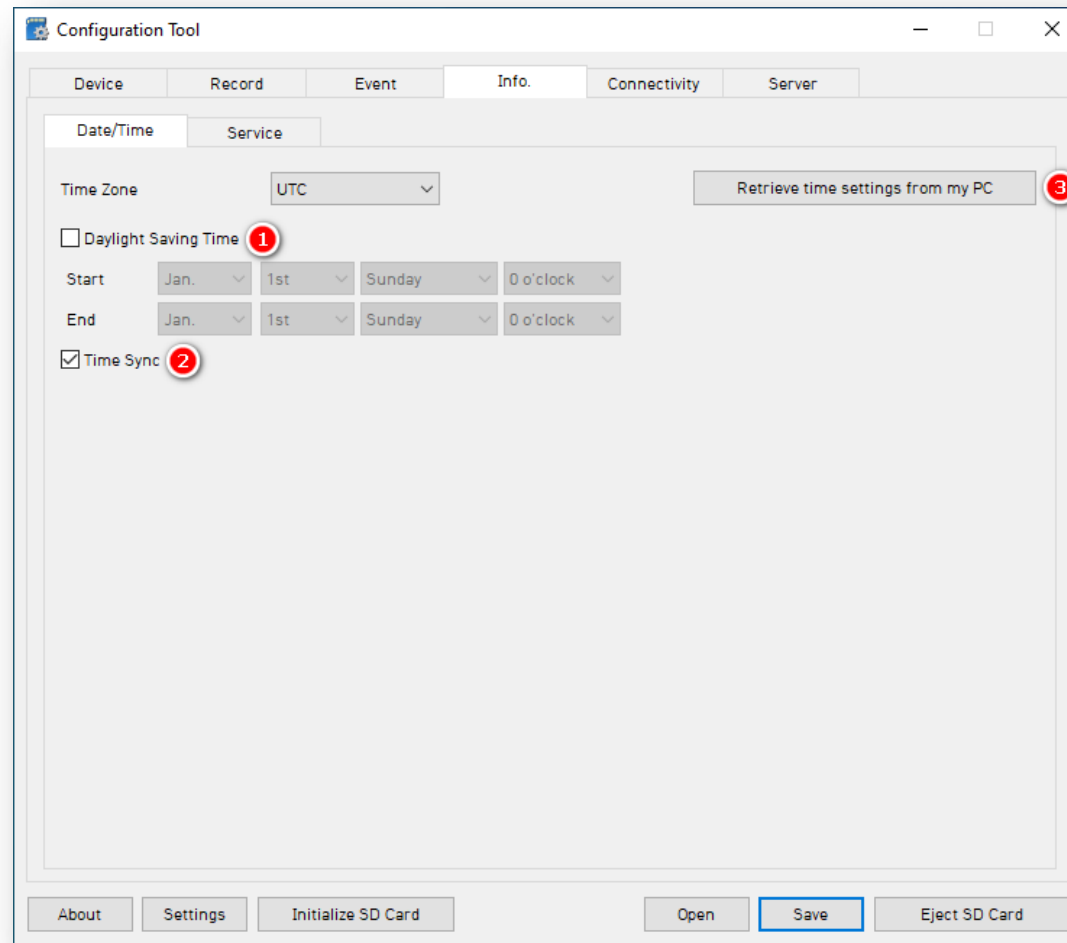
1. Search for the geographic region by entering an address into the text field and clicking **Go**.
2. Change the name of your Geofence in the **Title** text field.
3. To set a location-specific perimeter, click on the map
 - The area in **Red** is your Geofence.
4. Enable your Geofence by clicking **Add**.
5. To remove a Geofence, check the Geofence **No.** and click **Delete**.



Info

4.4 How to Configure Info Tab

Info Tab Layout: At a Glance

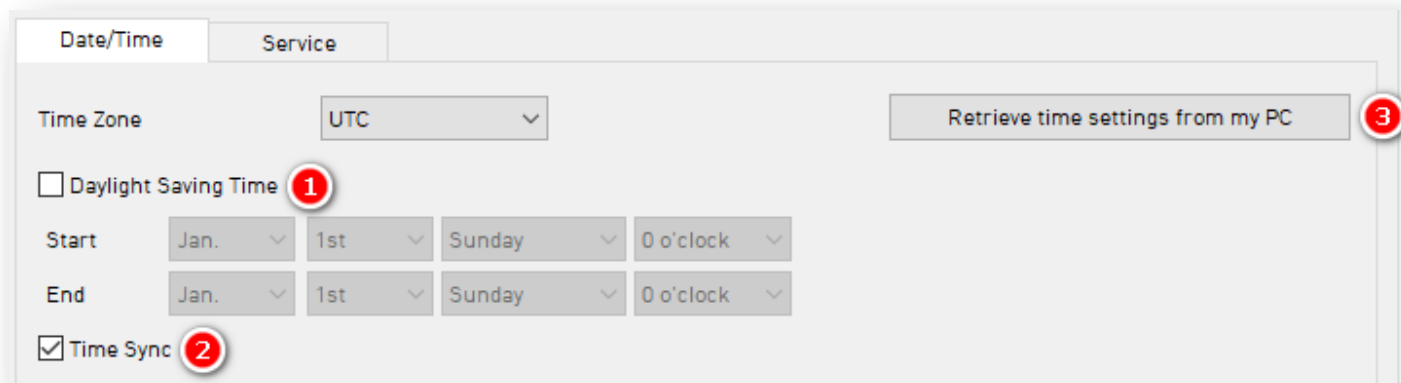


Info > Date/Time

4.4.1 Date/Time Fields

Setting time preferences on your CP2 is **not recommended**. PC Viewer software and Smart API automatically adjust UTC to your local time zone. **If you've connected your CP2 to Smart API, do not set time preferences.**

1. Set a customized date and time range for **Daylight Savings Time**.
2. Ensure GPS time syncs with device OS time by clicking **Time Sync**.
3. Use PC Viewer software to set your device's time zone by clicking **Retrieve time settings from my PC**.



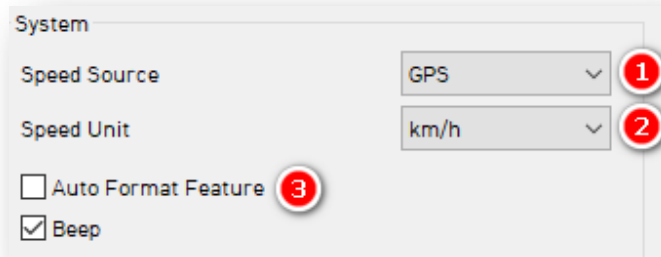
The screenshot shows the 'Date/Time' settings window. It has two tabs: 'Date/Time' (selected) and 'Service'. The 'Time Zone' is set to 'UTC'. There is a button labeled 'Retrieve time settings from my PC' with a red circle containing the number '3' next to it. Below this, there is a checkbox for 'Daylight Saving Time' with a red circle containing the number '1' next to it. Underneath, there are two rows for 'Start' and 'End' times, each with four dropdown menus: 'Jan.', '1st', 'Sunday', and '0 o'clock'. At the bottom, there is a checked checkbox for 'Time Sync' with a red circle containing the number '2' next to it.

Info > Service

4.4.2 Service Fields

System

1. Select a device **Speed Source**.
2. Set your preferred unit of speed from **Speed Unit** options.
3. Check **Auto Format Feature** to automate SD card maintenance when necessary.
 - This feature formats blank SD cards automatically. It does not apply to corrupted SDs. A “Media Error” event goes to the server. The red LED and an (optional) audible alarm turns on.
 - See “System Warning” on the next page.



System

Speed Source: GPS 1

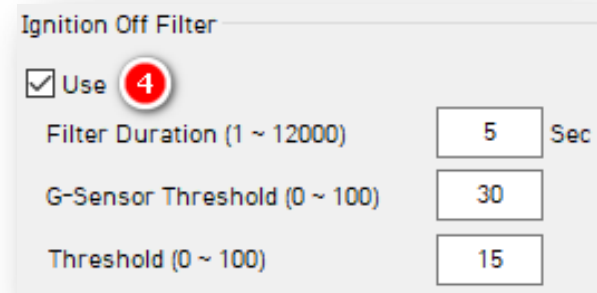
Speed Unit: km/h 2

Auto Format Feature 3

Beep

Ignition Off Filter

4. Turn on Ignition Off filter by clicking **Use**.
 - Set the time the device maintains ignition on operations with **Filter Duration**.
 - Set the value the **G-Sensor Threshold** must exceed to retain ignition on feature functionality.
 - To prevent false ignition off events, set the **Threshold** value.



Ignition Off Filter

Use 4

Filter Duration (1 ~ 12000): 5 Sec

G-Sensor Threshold (0 ~ 100): 30

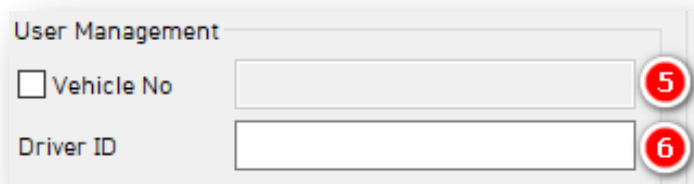
Threshold (0 ~ 100): 15

Info > Service

User Management

5. Assign a number to your vehicle by checking **Vehicle No** and entering a numerical value.
6. Write a unique **Driver ID** in the text field for different vehicles.

*You can watermark **Vehicle No & Driver ID** on your MP4 converted video feed with desktop analysis software.



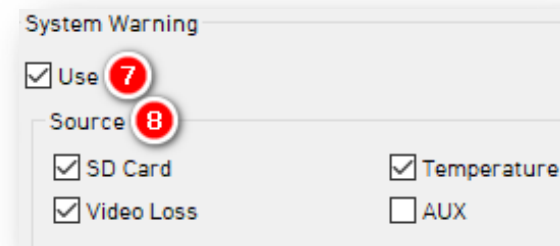
User Management

Vehicle No

Driver ID

System Warning

7. Provide notifications concerning system component corruption and/or failure by checking **Use**.
8. Check any/all boxes to send alerts of system corruption and/or failure.



System Warning

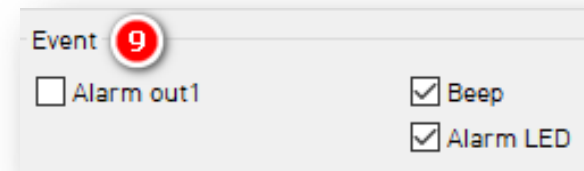
Use

Source

SD Card Temperature

Video Loss AUX

9. To enable these event notifications, click **Alarm out1, Beep** and **Alarm LED**.



Event

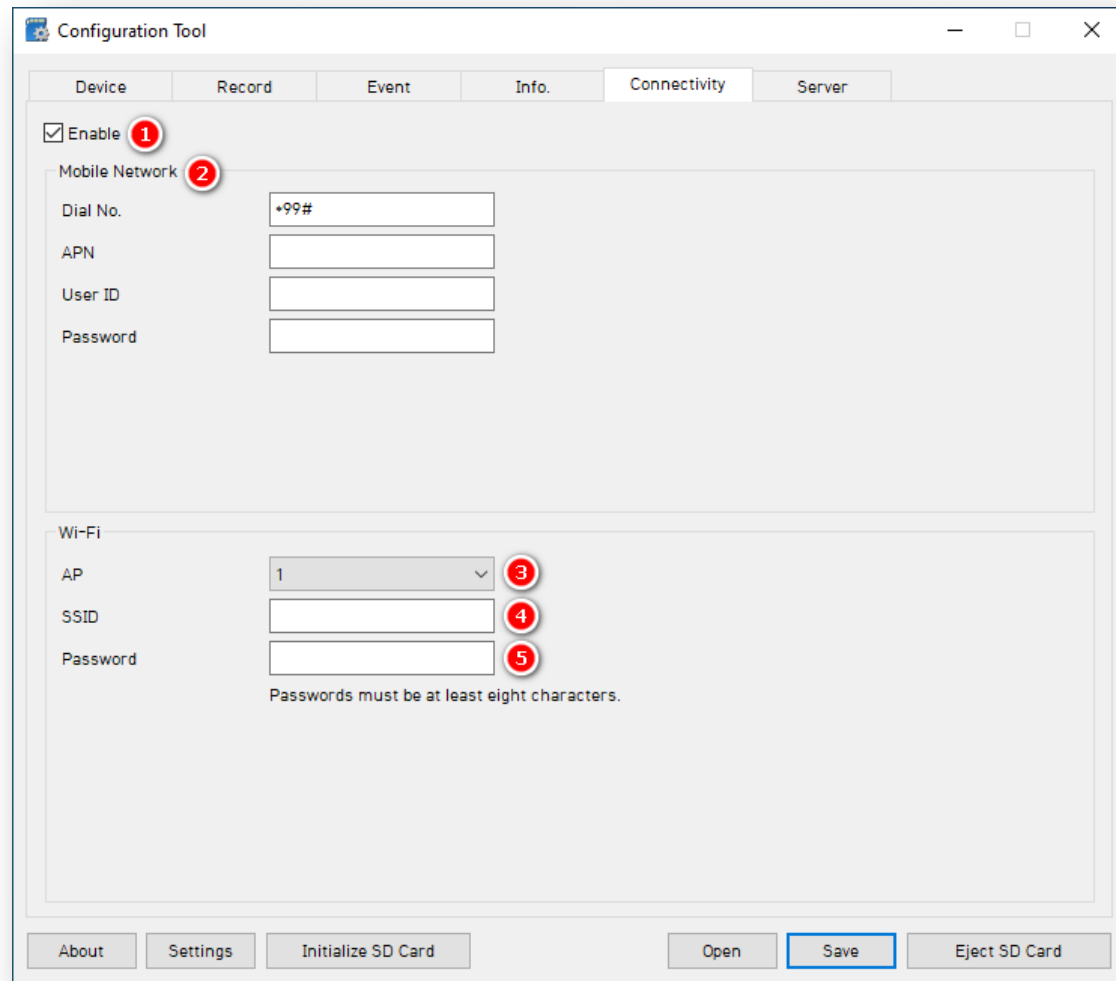
Alarm out1 Beep

Alarm LED

Connectivity

4.5 How to Configure Connectivity Tab

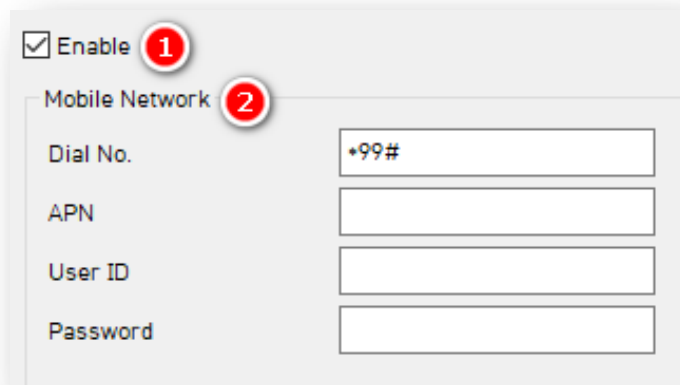
Connectivity Tab Layout: At A Glance



Connectivity

Mobile Network

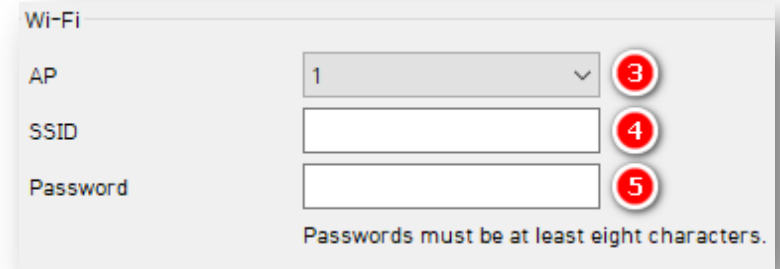
1. To specify mobile and WIFI network settings, check **Enable**.
2. Add **Mobile Network** details to relevant fields.
 - Ensure the **APN**, if using a SmartWitness SIM (AT&T), is “smartwitness.com.attz.”



The screenshot shows the Mobile Network settings interface. At the top, there is a checkbox labeled 'Enable' with a red circle containing the number '1' next to it. Below this is a section titled 'Mobile Network' with a red circle containing the number '2' next to it. Underneath, there are four input fields: 'Dial No.' with the text '+99#' inside, 'APN', 'User ID', and 'Password', all of which are currently empty.

Wi-Fi

3. Your CP2 has built-in Wi-Fi. Select your **AP** from the options provided. Your **AP** must be secure, accompanied by WPA/WPA2 encryption.
4. You can set up to 10 Wi-Fi **SSIDs**. The CP2 will scan for as many networks as are added in your settings.
5. Enter a **password**.

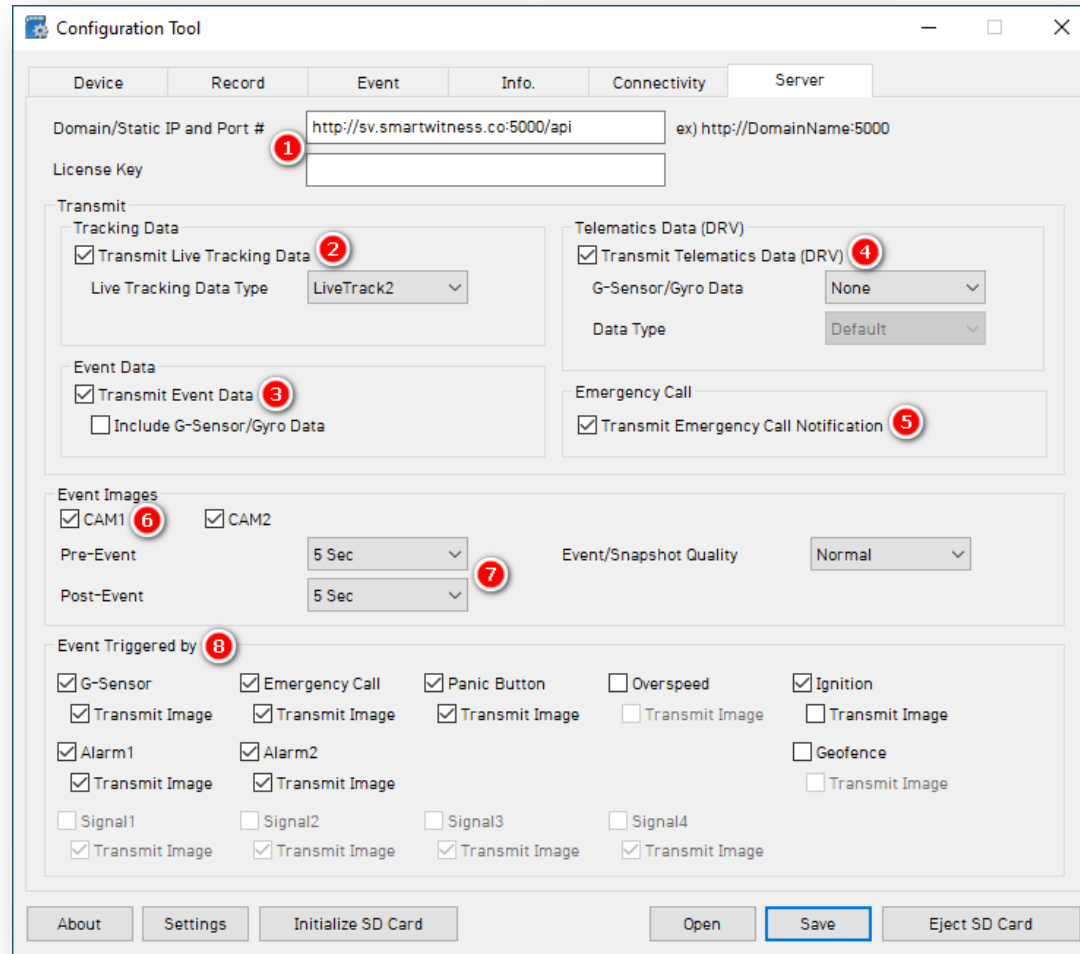


The screenshot shows the Wi-Fi settings interface. It features a dropdown menu for 'AP' with the number '1' selected and a red circle containing the number '3' next to it. Below the dropdown are two input fields: 'SSID' and 'Password', both of which are empty. A red circle containing the number '4' is next to the SSID field, and a red circle containing the number '5' is next to the Password field. At the bottom of the interface, there is a note that reads 'Passwords must be at least eight characters.'

Server

4.6 How to Configure Server Tab

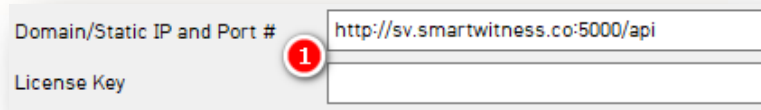
Server Tab Layout: At A Glance



Server

Server

1. SmartWitness, or your service provider, will give you the **Domain/Static IP and Port #** URL and the **License Key** (if necessary) to enter here.

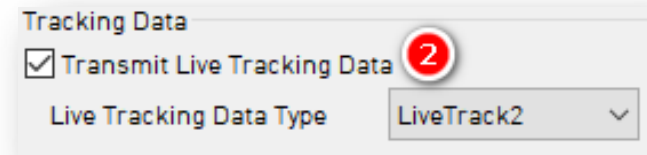


Domain/Static IP and Port #

License Key

Transmit

2. Use HTTP posts from your CP2 to the server by checking **Transmit Live Tracking Data**. Livetrack2 contains GPS coordinates. LiveTrack3 does not.

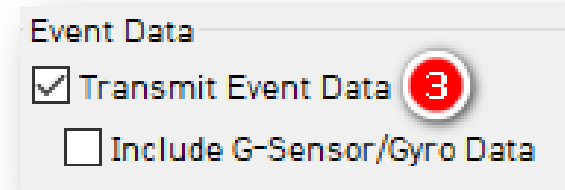


Tracking Data

Transmit Live Tracking Data 2

Live Tracking Data Type

3. To send event notifications and images to the server, check **Transmit Event Data**.



Event Data

Transmit Event Data 3

Include G-Sensor/Gyro Data

Server

4. To send DRV data to the server, check **Transmit Telematics Data (DRV)**.
5. Send Ecalls to the server via **Transmit Emergency Call Notification**.

Note: The frequency interval of LiveTrack and DRV uploads is server controlled.

Telematics Data (DRV)

Transmit Telematics Data (DRV) 4

G-Sensor/Gyro Data None

Data Type Default

Emergency Call

Transmit Emergency Call Notification 5

Event Images

6. Choose which camera channels send event images to the server by clicking **CAM1** and/or **CAM2**.
7. To determine snapshot timing before and after an event, select a **Pre-Event** and **Post-Event** time.

Event Images

CAM1 6 CAM2

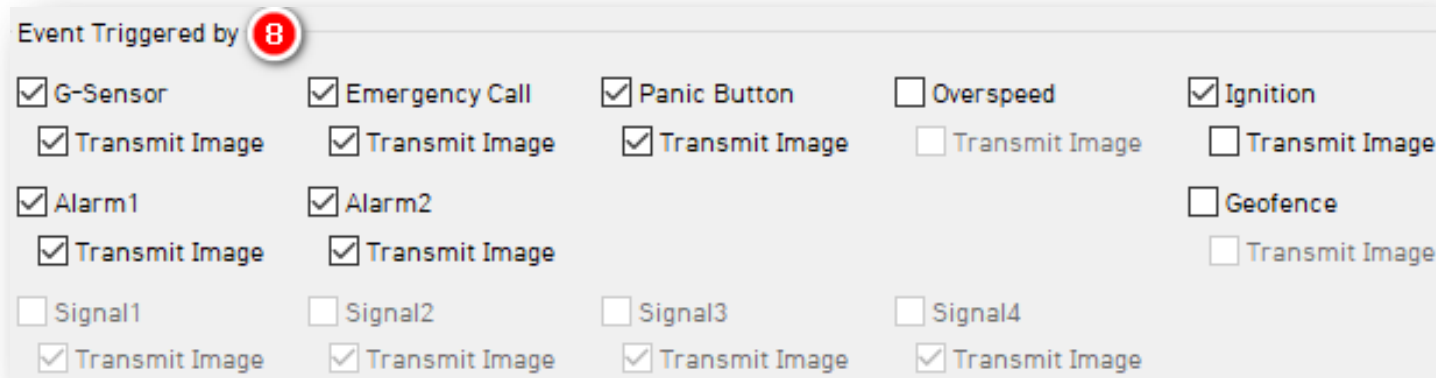
Pre-Event 5 Sec

Post-Event 5 Sec 7

Server

Event Triggered By

8. Choose what events your device sends to the server by clicking options like **G-Sensor** and **Emergency Call** (“SevereShock”). Events will instantly transmit even if the device is in “Continuous” record mode.



Event Triggered by 8				
<input checked="" type="checkbox"/> G-Sensor	<input checked="" type="checkbox"/> Emergency Call	<input checked="" type="checkbox"/> Panic Button	<input type="checkbox"/> Overspeed	<input checked="" type="checkbox"/> Ignition
<input checked="" type="checkbox"/> Transmit Image	<input checked="" type="checkbox"/> Transmit Image	<input checked="" type="checkbox"/> Transmit Image	<input type="checkbox"/> Transmit Image	<input type="checkbox"/> Transmit Image
<input checked="" type="checkbox"/> Alarm1	<input checked="" type="checkbox"/> Alarm2			<input type="checkbox"/> Geofence
<input checked="" type="checkbox"/> Transmit Image	<input checked="" type="checkbox"/> Transmit Image			<input type="checkbox"/> Transmit Image
<input type="checkbox"/> Signal1	<input type="checkbox"/> Signal2	<input type="checkbox"/> Signal3	<input type="checkbox"/> Signal4	
<input checked="" type="checkbox"/> Transmit Image	<input checked="" type="checkbox"/> Transmit Image	<input checked="" type="checkbox"/> Transmit Image	<input checked="" type="checkbox"/> Transmit Image	

Complete Your Configuration

5.0 Finishing Up/Support

Goal: Finalize your configuration and access support

1. Click **Save** to establish your finalized settings configuration.
2. Select **FHDRM** SD drive when prompted. You must save your configuration to your card.
3. Wait until confirmation that the software applied your settings configuration.
4. Click **Eject SD Card**, insert it into CP2, and power on your device.
5. You have completed your configuration.

Note: Apply device configurations over the air from the SmartAPI Workstation. See the instructions [here](#).

5.1 Support Information

If you need additional support or an expert to walk you through this process, please [register](#) and submit a ticket, or email us at support@smartwitness.com.

Feel free to call our support team:

North America, South America, APAC

- +1 (312) 981 8774

EMEA

- +44 (0) 1483 397005